



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,418	01/22/2004	Michael H. Feige	GECAN 3228	4549
23465	7590	02/15/2005	EXAMINER	
JOHN S. BEULICK C/O ARMSTRONG TEASDALE, LLP ONE METROPOLITAN SQUARE SUITE 2600 ST LOUIS, MO 63102-2740			SHECHTMAN, SEAN P	
		ART UNIT		PAPER NUMBER
		2125		
DATE MAILED: 02/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/762,418	FEIGE, MICHAEL H.	
	Examiner	Art Unit	
	Sean P. Shechtman	2125	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 December 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 01 December 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

1. Claims 1-20 are presented for examination. Claims 1, 5, 7, 8, 14, and 15 have been amended.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore the program configured to recognize a subassembly or part not selected by an operator must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. Objections withdrawn due to the amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 4, 5, 7, 11, 12, 14, 18, and 19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Examiner specifically points to the term “recognize” only as it is used in the phrase “program configured to recognize at least one of a subassembly or a part not selected ”.

Claims 4, 5, 7, 11, 12, 14, 18, and 19 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for not turning on a portion of a program if that portion is not selected by an operator, does not reasonably provide enablement for a program configured to recognize a subassembly or part that has not been selected. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims.

Examiner respectfully submits that the specification fails to reasonably provide enablement for any such recognition program, inference engine/database, expert system, artificial intelligence, learning robot or any other means/system configured to recognize a subassembly or part that has not been selected. Examiner respectfully submits that, although the specification does reasonably provide enablement for not turning on a portion of a program when the operator may desire not to select a specific subassembly or part (See page 4, paragraph 0018

of the instant specification), the specification teaches that this causes the program to skip or omit steps, not recognize what the operator intended to not select.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1, 3, 8, 10, 15, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,818,721 to Funahashi.

Referring to claims 1, 8, 15, Funahashi teaches a computer and method (Fig. 5, element 40; Col. 4, line 64; Col. 4, line 51-56) for facilitating manufacturing (Col. 1, lines 28-40; Col. 6, lines 58-59) with at least one manufacturing tool (Col. 1, lines 41-50), said computer configured to: generate a computer model of an object generated using a design program (Col. 4, lines 51-56; Col. 5, lines 63-67); and automatically extracting the model from the design program and automatically input the computer model into a planning program configured to generate instructions for fabricating the object (Col. 5, line 63 – Col. 6, line 12); and fabricating the object using the tool based on the planning program (Col. 6, lines 7-8; Col. 1, line 41-50).

Funahashi clearly teaches that the CAD device can “automatically convert the synthesized design into a work program” (Col. 6, lines 1-3).

Referring to claims 3, 10, and 17, Funahashi teaches the above, wherein said computer is further configured to automatically input at least a portion of the computer model into a planning program, said planning program including a plurality of operations to fabricate the object (Col. 3, lines 21-40).

6. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pub. No. 2003/0171842 to Teramoto.

Referring to claims 1, 4, 7, 8, 11, 14, 15 and 18, Teramoto teaches a computer and method for facilitating manufacturing (Page 12, paragraph 174) with at least one manufacturing tool (Page 12, paragraph 176), said computer configured to: generate a computer model of an object generated using a design program (Page 12, paragraph 174); and automatically extracting the model from the design program and automatically input at least a portion of the computer model into a planning program configured to generate instructions for fabricating the object (Page 12, paragraph 174-177; Pages 1-2, paragraph 10; Page 2, paragraph 15, all integrated); said planning program configured to recognize at least one of a subassembly and a part not selected by an operator (Page 12, paragraph 166); and automatically update the planning program/list of operations to fabricate the object (Page 19, claim 6); and fabricating the object using the manufacturing tool based on the planning program (Page 12, paragraphs 174-176).

Teramoto teaches an invention that recognizes the portions of work already machined in previous processes and generates NC data with so that the already-machined portions are not remachined (Page 12, paragraph 166). Examiner asserts that such a recognition is recognizing at least a part or subassembly that the operator does not select because they have already been machined (See figures 3 and 4 of the instant specification, wherein it is clear that a part or subassembly not selected is a cutout).

Referring to claim 2, 9, 16, Teramoto teaches the above, wherein said computer is further configured to automatically select a tool based on the planning program (Page 12, paragraph 176).

Referring to claims 3, 10, 17, Teramoto teaches the above, wherein said computer is further configured to automatically input at least a portion of the computer model into a planning program including a plurality of operations to fabricate an object (Page 12, paragraph 176).

Referring to claim 5, 12, 19, Teramoto teaches the above, wherein said computer further configured to automatically modify a tooling list (Page 12, paragraph 176).

Referring to claim 6, 13, 20, Teramoto teaches the above, wherein said computer further configured to automatically input at least a portion of the computer model into a planning program including a tooling list (Page 9, paragraph 105 and 112).

Response to Arguments

Applicant's arguments filed December 1st 2004 have been fully considered but they are not persuasive.

7. Applicant argues that "planning will only be shown for all desired parts or subassemblies", shown in a block in figure 2, is an exemplary embodiment of a program configured to recognize a subassembly or part not selected by an operator.

The examiner respectfully disagrees. The examiner respectfully submits that the phrase "planning will only be shown for all desired parts or subassemblies" can at most be an exemplary embodiment of a program configured to recognize a subassembly or part selected by an operator.

8. Applicant argues that the specification does reasonably provide for a program configured to recognize a subassembly or part not selected by an operator.

The examiner respectfully disagrees. Applicant's argument that an operator may desire to fabricate top-level assembly without a specific part can at most provide for recognition on the behalf of the operator. By applicant's rationale, one of ordinary skill in the art would consider

the teaching of a push-button in the idle/off position, as a push-button configured to recognize that an operator has not turned it on. The examiner respectfully believes that the push-button in the idle/off position lacks the necessary intelligence/knowledge/awareness to realize that an operator has not turned it on. Hence, the examiner's position is that the program, taught as such, lacks the necessary intelligence/knowledge/awareness to realize something that an operator has not selected. The term recognition, given its plain meaning, requires intelligence/knowledge/awareness that the program, as taught, does not have.

9. Applicant argues that Funahashi fails to teach automatically inputting.

The examiner respectfully disagrees. Funahashi clearly teaches that the CAD device can "automatically convert the synthesized design into a work program" (Col. 6, lines 1-3), wherein CAD is a computer aided design program. The examiner respectfully submits that automatically converting design from a design program to a work program is automatically extracting and inputting design from a design program to a work program.

10. Applicant argues that Teramoto fails to teach automatically inputting.

The examiner respectfully disagrees. Teramoto clearly teaches CAD data from a CAD program is converted to NC data for a machining program (Page 12, paragraphs 174-177). The examiner respectfully submits that converting CAD data from a CAD program to NC data for a machining program is automatically extracting and inputting CAD data from a CAD program to a machining program.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2125

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. The prior art or art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents or publications are cited to further show the state of the art with respect to automatically extracting and inputting CAD data from a CAD program to populate NC program files in a database.

U.S. Pat. No. 6,430,455 to Rebello.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571) 272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SPS

Sean P. Shechtman

February 12, 2005

L.P. Picard
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100